

RECEIVED
FEB 14 2003
TECH CENTER 1600/2900
FEB 14 2003
1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

4 <110> APPLICANT: Crofts, Linda Anne
 5 Hancock, Manuela S.
 6 Morrison, Nigel A.
 7 Eisman, John A.
 9 <120> TITLE OF INVENTION: Isoforms of the Human Vitamin D Receptor
 12 <130> FILE REFERENCE: RICE-014
 14 <140> CURRENT APPLICATION NUMBER: 09/509,482B
 15 <141> CURRENT FILING DATE: 2000-09-15
 17 <150> PRIOR APPLICATION NUMBER: PCT/AU98/00817
 18 <151> PRIOR FILING DATE: 1998-09-29
 20 <150> PRIOR APPLICATION NUMBER: P09500
 21 <151> PRIOR FILING DATE: 1997-09-29
 23 <160> NUMBER OF SEQ ID NOS: 20
 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 106
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Homo sapiens
 32 <400> SEQUENCE: 1
 33 gttccttct tctgtcgggg cgccttgca tggagtggag gaataagaaa aggagcgatt 60
 34 ggctgtcgat ggtgctcaga actgctggag tggagggtgt gtaacc 106
 36 <210> SEQ ID NO: 2
 37 <211> LENGTH: 1463
 38 <212> TYPE: DNA
 39 <213> ORGANISM: Homo sapiens
 41 <400> SEQUENCE: 2
 42 gttccttct tctgtcgggg cgccttgca tggagtggag gaataagaaa aggagcgatt 60
 43 ggctgtcgat ggtgctcaga actgctggag tggaggaagc ctggggctct gaagtgtctg 120
 44 tgagaccta cagaagagca cccctggct ccacttacct gccccctgtct cttcaggaa 180
 45 tggaggcaat ggcggccagc acttccctgc ctgaccctgg agactttgac cgaaacgtgc 240
 46 cccggatctg tggggtgtgt ggagaccgag ccactggctt tcacttcaat gctatgaccc 300
 47 gtgaaggctg caaaggcttc ttccaggcga gcatgaagcg gaaggcaacta ttccacccgt 360
 48 cttcaacgg ggactgccgc atcacaagg acaaccgacg ccactgccag gcctgccggc 420
 49 tcaaacgctg tgtggacatc ggcatgtga aggagttcat tctgacagat gaggaagtgc 480
 50 agaggaagcg ggagatgatc ctgaagcgaa aggaggagga ggccttgaag gacagtctgc 540
 51 ggcccaagct gtctgaggag cagcagcgca tcattgcccactgctggac gcccaccata 600
 52 agacctacga ccccacctac tccgacttct gccagttccg gcctccaggct cgtgtgaatg 660
 53 atggtgtggagg gagccatctc tccaggccca actccagaca cactcccagc ttctctgggg 720
 54 actcctcctc ctccatgtca gatcaactgttca tcacctcttc agacatgtatg gactcgtcca 780
 55 gcttctccaa tctggatctg agtgaagaag attcagatga cccttctgtg acccttagacg 840
 56 tgtcccagct ctccatgtctg ccccacctgg ctgaccctgg cagttacagc atccaaaagg 900
 57 tcattggctt tgctaaatg ataccaggat tcagagacct cacctctgag gaccagatcg 960
 58 tactgctgaa gtcaagtgcc attgaggtca tcatgttgcg ctccaatgag tccttcacca 1020

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

59	tggacgacat gtcctggacc tggacttcaacc aagactacaa gtaccgcgtc agtacgtga	1080
60	ccaaaggccgg acacagcctg gagctgattt agccccatcat caagttccag gtggactga	1140
61	agaagctgaa cttgcattttag gaggagcatg tcctgtcat gcccatttgc atcgcttccc	1200
62	cagatgtcc tgggtgcag gacgcccgc tgatttggc catccaggac cgcctgtcca	1260
63	acacactgca gacgtacatc cgctgccgc accccggggc gggcagccac ctgtcttatg	1320
64	ccaagatgtat ccagaagcta gccgacctgc gcagcctcaa tgaggagcac tccaaggcgt	1380
65	accgctgcct ctccttccag ctttgcata gcatgaagct aacggccctt gtgctcgaag	1440
66	tgtttggcaa tgagatctcc tga	1463
68	<210> SEQ ID NO: 3	
69	<211> LENGTH: 1382	
70	<212> TYPE: DNA	
71	<213> ORGANISM: Homo sapiens	
73	<400> SEQUENCE: 3	
74	gtttccttct tctgtcgggg cgccttggca tggagtggag gaataagaaa aggagcgatt	60
75	ggctgtcgat ggtgctcaga actgttggag tggagggat ggaggcaatg gcgcccgac	120
76	cttccctgcc tgacccttggaa gacttttggacc ggaacgttgc ccggatctgt ggggtgttg	180
77	gagaccgagc cactggctt cacttcaatg ctatgacctg tgaaggctgc aaaggcttct	240
78	tcaggcgaag catgaagcgg aaggcactat tcacccgtt cttcaacggg gactgcccga	300
79	tcaccaagga caaccggacgc cactggcagg cctggcgct caaacgttgc gtggacatcg	360
80	gcatgtgaa ggagttcatt ctgacatgtt aggaagtgc gaggaaaggc gagatgtatcc	420
81	tgaagcggaa ggaggaggag gccttgaagg acagtctgc gcccaagctg tctgaggagc	480
82	agcagcgcattt cattggccata ctgcttggacccc accaccataa gacctacgac cccacact	540
83	ccgacttctg ccagttccgg cctccagttt gtgtgaatga tgggtggaggg agccatcctt	600
84	ccaggcccaa ctccagacac actcccagct tctctggga ctccctcttcc tcctgtctcg	660
85	atactgtat cacctttca gacatgttgc actgttccag cttctccat ctggatctga	720
86	gtgaagaaga ttcatgttgc ccttctgttgc cccttgcgtt gtcccttgc tccatgttgc	780
87	cccacctggc tgacctggc agtttacagca tccaaaaggat cattggctt gctaagatga	840
88	taccaggatt cagagacctc acctcttggg accagatctgtt actgttgc gtaatgttca	900
89	tttgggtcat catgttgcgc tccatgttgc ctttccat ggtttttttt ggtttttttt	960
90	gtggcaacca agactacaatg taccgttgcgtt gtgtttttttt ggtttttttt ggtttttttt	1020
91	agctgttgc gccccttcatc aagtccagg tggacttgc gaaatgttgc gttttttttt	1080
92	aggagcatgtt cttgttgcgtt gccatcttgc tttttttttt agatgttgc tttttttttt	1140
93	acgcccgcgtt gatttggggcc atccaggacc gcttgccttccaa cacactgttgc acgttacatcc	1200
94	gcttgcgcgc cccggggggc ggcagccacc ttgtttttttt ggtttttttt ggtttttttt	1260
95	ccgaccttgcgtt cttttttttt gggggggggc gttttttttt ggtttttttt ggtttttttt	1320
96	ttttttttttt gggggggggc gttttttttt ggtttttttt ggtttttttt ggtttttttt	1380
97	ttttttttttt gggggggggc gttttttttt ggtttttttt ggtttttttt ggtttttttt	1382
99	<210> SEQ ID NO: 4	
100	<211> LENGTH: 1534	
101	<212> TYPE: DNA	
102	<213> ORGANISM: Homo sapiens	
104	<400> SEQUENCE: 4	
105	gtttccttct tctgtcgggg cgccttggca tggagtggag gaataagaaa aggagcgatt	60
106	ggctgtcgat ggtgctcaga actgttggag tggagggat ggaggcaatg gcgcccgac	120
107	cttccctgcc tgacccttggaa gacttttggacc ggaacgttgc ccggatctgt ggggtgttg	180
108	gagaccgagc cactggctt cacttcaatg ctatgacctg tgaaggctgc aaaggcttct	240
109	tcagggttgc ccccttccat ggtttttttt ggtttttttt ggtttttttt ggtttttttt	300
110	ttttttttttt gggggggggc gttttttttt ggtttttttt ggtttttttt ggtttttttt	360
111	ttttttttttt gggggggggc gttttttttt ggtttttttt ggtttttttt ggtttttttt	420

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003

TIME: 11:00:43

Input Set : D:\Seqlist.txt

Output Set: N:\CRF4\02032003\I509482B.raw

112	attcacctgc cccttcaacg gggactgccc catcaccaag gacaaccgac gccactgcc	480
113	ggcctccgg ctcaaacgct gtgtggacat cggcatgatg aaggagttca ttctgacaga	540
114	ttaggaagtg cagaggaagc gggagatgat cctgaagcgg aaggaggagg aggccttcaa	600
115	ggacagtctg cgccccaaagc tgtctgagga gcagcagcgc atcattgcca tactgctgga	660
116	cgcaccat aagacctacg acccccaccta ctccgacttc tgccagttcc gcctccagg	720
117	tctgtgtaaat gatgggtggag ggagccatcc ttccaggccc aactccagac acactcccg	780
118	tttctctggg gactcctcct ctcctgctc agatcactgt atcaccttt cagacatgat	840
119	ggactcgtcc agcttctcca atctggatct gagtgaagaa gattcagatg accctctgt	900
120	gacccttagag ctgtcccagc tctccatgct gccccaccc gctgacccctgg tcagttacag	960
121	catccaaaag gtcattggct ttgctaagat gataccagga ttccagagacc tcacctctga	1020
122	ggaccagatc gtactgctga agtcaagtg cattggaggc atcatgttgc gctccaatqa	1080
123	gtccttcacc atggacgaca tgtcctggac ctgtggcaac caagactaca agtaccgcgt	1140
124	cagtgacgtg accaaagccg gacacagcct ggagctgatt gagccctca tcaagttcca	1200
125	ggtgggactg aagaagctga acttgcataa ggaggagcat gtcctgctca tggccatctg	1260
126	catgtctcc ccagatcgta ctggggtgca ggacccgcgt ctgattgagg ccatccagga	1320
127	ccgcctgtcc aacacactgc agacgtacat ccgtgcgcgc caccgcggcc cgccgaccca	1380
128	cctgctctat gccaagatga tccagaagct agccgaccc gtcagccctca atgaggagca	1440
129	ctccaaggcag taccgctgcc ttccttcca gcctgagtg agcatgaagc taacgcccct	1500
130	tgtgctcgaa gtgttggca atgagatctc ctga	1534
132	<210> SEQ ID NO: 5	
133	<211> LENGTH: 207	
134	<212> TYPE: DNA	
135	<213> ORGANISM: Homo sapiens	
137	<400> SEQUENCE: 5	
138	tgcgaccttgc gcggtgagcc tggggacagg ggtgaggcca gagacggacg gacgcagggg	60
139	cccgcccaa ggcgaggagg aacagcggca ctaaggcaga aaggaagagg gcggtgtgtt	120
140	cacccgcagc ccaatccatc actcagcaac tcctagacgc tggtagaaag ttccctccgag	180
141	gaggctgcca tccagtcgtc cgtgcag	207
143	<210> SEQ ID NO: 6	
144	<211> LENGTH: 167	
145	<212> TYPE: DNA	
146	<213> ORGANISM: Homo sapiens	
148	<400> SEQUENCE: 6	
149	aggcagcatg aaacagtggg atgtcagag agaagatctg ggtccagtag ctctgacact	60
150	cctcagctgt agaaaccttgc acaactctgc acatcagttg tacaatggaa cggtatTTTT	120
151	tactcttcat gtctgaaaag gctatgataa agatcaagta agatatt	167
153	<210> SEQ ID NO: 7	
154	<211> LENGTH: 1574	
155	<212> TYPE: DNA	
156	<213> ORGANISM: Homo sapiens	
158	<400> SEQUENCE: 7	
159	tgcgaccttgc gcggtgagcc tggggacagg ggtgaggcca gagacggacg gacgcagggg	60
160	cccgcccaa ggcgaggagg aacagcggca ctaaggcaga aaggaagagg gcggtgtgtt	120
161	cacccgcagc ccaatccatc actcagcaac tcctagacgc tggtagaaag ttccctccgag	180
162	gaggctgcca tccagtcgtc cgtgcagaag ccttgggtc tgaagtgtct gtgagacctc	240
163	acagaagagc accccctggc tccacttacc tgccccctgc tccttcaggg atggaggcaa	300
164	tggcggccag cacttccctg cctgaccctg gagacttga ccggAACGTG ccccgatct	360
165	gtgggggtgt tggagaccga gccactggct ttcacttcaa tgctatgacc tggaaaggct	420
166	gcaaggctt cttcaggcga agcatgaagc ggaaggcact attcacctgc cccttcaacg	480

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

167	gggactgccg	catcaccaag	gacaaccgac	gccactgcc	ggcctgccgg	ctcaaacgct	540										
168	gtgtggacat	cggcatgatg	aaggagttca	ttctgacaga	tgaggaagt	cagaggaagc	600										
169	gggagatgt	cctgaagcgg	aaggaggagg	aggccttcaa	ggacagtct	cgccccaaagc	660										
170	tgtctgagga	gcagcagcgc	atcattgcca	tactgcttga	cgccccaccat	aagacctacg	720										
171	accccaccta	ctccgacttc	tgccagttcc	ggcctccagt	tcgtgtgaat	gatgggtggag	780										
172	ggagccatcc	ttccaggccc	aactccagac	acactcccag	tttctctggg	gactcctccct	840										
173	cctcctgctc	agatcactgt	atcaccttctt	cagacatgtat	ggactcgctcc	agcttctcca	900										
174	atctggatct	gagtgaagaa	gattcagatg	acccttctgt	gacccttagag	ctgtcccagc	960										
175	tctccatgt	gccccacact	gctgacctgg	tcagttacag	catccaaaag	gtcattggct	1020										
176	ttgctaagat	gataccagga	ttcagagacc	tcacctctga	ggaccagatc	gtactgctga	1080										
177	agtcaagtgc	cattgaggta	atcatgttgc	gctccaaatga	gtccttcacc	atggacgaca	1140										
178	tgtcctggac	ctgtggcaac	caagactaca	agtaccgcgt	cagtgacgt	acccaaagccg	1200										
179	gacacagcct	ggagctgatt	gagccctca	tcaagttcca	gggggactg	aagaagctga	1260										
180	acttgcata	ggaggagcat	gtcctgctca	tggccatctg	catcgcttcc	ccagatcg	1320										
181	ctggggtgca	ggacgcccgc	ctgattgagg	ccatccagga	ccgcctgtcc	aacacactgc	1380										
182	agacgtacat	ccgctgccgc	cacccgcccc	cgggcagcca	cctgcttat	gccaaagatga	1440										
183	tccagaagct	agccgacact	cgcagcctca	atgaggagca	ctccaagcag	taccgctgcc	1500										
184	tctccttcca	gcctgagtgc	agcatgaagc	taacgcccct	tgtgctcgaa	gtgtttggca	1560										
185	atgagatctc	ctga					1574										
187	<210>	SEQ ID NO:	8														
188	<211>	LENGTH:	122														
189	<212>	TYPE:	DNA														
190	<213>	ORGANISM:	Homo sapiens														
192	<400>	SEQUENCE:	8														
193	ggctcctgaa	cctagccag	ctggacggag	aatggactc	tagcctcctc	tgatagcctc	60										
194	atgccaggcc	ccgtgcacat	tgcttgctt	gcctccctca	atccatcatag	cttctctttg	120										
195	gg						122										
197	<210>	SEQ ID NO:	9														
198	<211>	LENGTH:	477														
199	<212>	TYPE:	PRT														
200	<213>	ORGANISM:	Homo sapiens														
202	<400>	SEQUENCE:	9														
203	Met	Glu	Trp	Arg	Asn	Lys	Lys	Arg	Ser	Asp	Trp	Leu	Ser	Met	Val	Leu	
204	1				5				10				15				
205	Arg	Thr	Ala	Gly	Val	Glu	Glu	Ala	Phe	Gly	Ser	Glu	Val	Ser	Val	Arg	
206						20			25				30				
207	Pro	His	Arg	Arg	Ala	Pro	Leu	Gly	Ser	Thr	Tyr	Leu	Pro	Pro	Ala	Pro	
208						35			40				45				
209	Ser	Gly	Met	Glu	Ala	Met	Ala	Ala	Ser	Thr	Ser	Leu	Pro	Asp	Pro	Gly	
210						50			55				60				
211	Asp	Phe	Asp	Arg	Asn	Val	Pro	Arg	Ile	Cys	Gly	Val	Cys	Gly	Asp	Arg	
212						65			70				75			80	
213	Ala	Thr	Gly	Phe	His	Phe	Asn	Ala	Met	Thr	Cys	Glu	Gly	Cys	Lys	Gly	
214						85				90				95			
215	Phe	Phe	Arg	Arg	Ser	Met	Lys	Arg	Lys	Ala	Leu	Phe	Thr	Cys	Pro	Phe	
216						100			105				110				
217	Asn	Gly	Asp	Cys	Arg	Ile	Thr	Lys	Asp	Asn	Arg	Arg	His	Cys	Gln	Ala	
218						115			120				125				
219	Cys	Arg	Leu	Lys	Arg	Cys	Val	Asp	Ile	Gly	Met	Met	Lys	Glu	Phe	Ile	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:43

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw

220	130	135	140													
221	Leu	Thr	Asp	Glu	Glu	Val	Gln	Arg	Lys	Arg	Glu	Met	Ile	Leu	Lys	Arg
222	145					150			155							160
223	Lys	Glu	Glu	Glu	Ala	Leu	Lys	Asp	Ser	Leu	Arg	Pro	Lys	Leu	Ser	Glu
224						165			170							175
225	Glu	Gln	Gln	Arg	Ile	Ile	Ala	Ile	Leu	Leu	Asp	Ala	His	His	Lys	Thr
226						180			185							190
227	Tyr	Asp	Pro	Thr	Tyr	Ser	Asp	Phe	Cys	Gln	Phe	Arg	Pro	Pro	Val	Arg
228						195			200							205
229	Val	Asn	Asp	Gly	Gly	Gly	Ser	His	Pro	Ser	Arg	Pro	Asn	Ser	Arg	His
230						210			215							220
231	Thr	Pro	Ser	Phe	Ser	Gly	Asp	Ser	Ser	Ser	Cys	Ser	Asp	His	Cys	
232	225					230			235							240
233	Ile	Thr	Ser	Ser	Asp	Met	Met	Asp	Ser	Ser	Ser	Phe	Ser	Asn	Leu	Asp
234						245			250							255
235	Leu	Ser	Glu	Glu	Asp	Ser	Asp	Asp	Pro	Ser	Val	Thr	Leu	Glu	Leu	Ser
236						260			265							270
237	Gln	Leu	Ser	Met	Leu	Pro	His	Leu	Ala	Asp	Leu	Val	Ser	Tyr	Ser	Ile
238						275			280							285
239	Gln	Lys	Val	Ile	Gly	Phe	Ala	Lys	Met	Ile	Pro	Gly	Phe	Arg	Asp	Leu
240						290			295							300
241	Thr	Ser	Glu	Asp	Gln	Ile	Val	Leu	Leu	Lys	Ser	Ser	Ala	Ile	Glu	Val
242						305			310							320
243	Ile	Met	Leu	Arg	Ser	Asn	Glu	Ser	Phe	Thr	Met	Asp	Asp	Met	Ser	Trp
244						325			330							335
245	Thr	Cys	Gly	Asn	Gln	Asp	Tyr	Lys	Tyr	Arg	Val	Ser	Asp	Val	Thr	Lys
246						340			345							350
247	Ala	Gly	His	Ser	Leu	Glu	Leu	Ile	Glu	Pro	Leu	Ile	Lys	Phe	Gln	Val
248						355			360							365
249	Gly	Leu	Lys	Lys	Leu	Asn	Leu	His	Glu	Glu	Glu	His	Val	Leu	Leu	Met
250						370			375							380
251	Ala	Ile	Cys	Ile	Val	Ser	Pro	Asp	Arg	Pro	Gly	Val	Gln	Asp	Ala	Ala
252						385			390							400
253	Leu	Ile	Glu	Ala	Ile	Gln	Asp	Arg	Leu	Ser	Asn	Thr	Leu	Gln	Thr	Tyr
254						405			410							415
255	Ile	Arg	Cys	Arg	His	Pro	Pro	Pro	Gly	Ser	His	Leu	Leu	Tyr	Ala	Lys
256						420			425							430
257	Met	Ile	Gln	Lys	Leu	Ala	Asp	Leu	Arg	Ser	Leu	Asn	Glu	Glu	His	Ser
258						435			440							445
259	Lys	Gln	Tyr	Arg	Cys	Leu	Ser	Phe	Gln	Pro	Glu	Cys	Ser	Met	Lys	Leu
260						450			455							460
261	Thr	Pro	Leu	Val	Leu	Glu	Val	Phe	Gly	Asn	Glu	Ile	Ser			
262						465			470							475
264	<210>	SEQ	ID	NO:	10											
265	<211>	LENGTH:	450													
266	<212>	TYPE:	PRT													
267	<213>	ORGANISM:	Homo sapiens													
269	<400>	SEQUENCE:	10													
270	Met	Glu	Trp	Arg	Asn	Lys	Lys	Arg	Ser	Asp	Trp	Leu	Ser	Met	Val	Leu

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/509,482B

DATE: 02/03/2003
TIME: 11:00:44

Input Set : D:\Seqlist.txt
Output Set: N:\CRF4\02032003\I509482B.raw